

METHOD OF MEASURING A GATE CHANNEL LENGTH OF A METAL–OXIDE SEMI–CONDUCTOR TRANSISTOR

Abstract

A predetermined voltage is applied respectively on a first gate of a first metal–oxide semiconductor (MOS) transistor with a known channel length and a second gate of a second MOS transistor with an unknown channel length. A first inverse gate leakage current of the first MOS transistor and a second inverse gate leakage current of the second MOS transistor are then measured. By using the first and second inverse gate leakage currents, the channel widths of the first and the second gates, the channel length of the first gate and an equation, the channel length of the second gate is obtained.